



Illinois Department of Revenue

Sales and Use Tax Direct Electronic Filing Implementation Guide IL- STS 81

Table of Contents

Section 1 – Overview	3
Section 2 - Contact Information	4
Section 3 - Enrollment for Electronic Filing and Electronic Funds Transfer	5
Section 4 - Payment Information	6
Section 5 - Timeliness and Date Received of Return and Payment	7
Section 6 - Monitoring and Suspension	8
Section 7 - Communications Using HTTPS	9
Section 8 – Specifications	13
Structure of Transmission	14
Data Format	16

Section 1 – Overview

The Illinois Department of Revenue (IDOR) has implemented an electronic filing program to accept and acknowledge the following

- ◆ ☐ ST1, Sales and Use Tax Return
- ◆ ☐ ST1, Back Schedule A (Line 2)
- ◆ ☐ ST1, Back Schedule B (Line 21)
- ◆ ☐ ST2, Multiple Site Form (attachment for ST-1)
- ◆ ☐ PST2, Prepaid Sales Tax Statement of Tax Paid, Copy A (attachment for ST-1, Line 17)
- ◆ ☐ Debit Detail Record (Initiation of Debit Payment for ST1, RR-3, PST-1, PST-3)

Special multi-site schedules for direct pay and temporary storage may also be electronically filed. Returns must be transmitted to IDOR using HTTPS protocol and the internet to access the "Illinois Gateway".

The program is open to electronic filers using IDOR approved software, software developers, and transmitters. All participants must enroll using Form IL-8633-B, Business Electronic Filing Enrollment. Software developers and transmitters are required to test prior to acceptance. Taxpayers will select a "signature code" (electronic signature) that they will use to sign all returns. This signature code is transmitted within each electronic return.

Taxpayer participants will have the option of paying electronically by ACH Debit, ACH Credit, or by paper check.

Note: Taxpayers mandated to pay electronically must use the ACH Debit or ACH Credit option.

ACH Debit Option

Taxpayers do not need to complete the EFT-1 for the ACH Debit option to pay their Sales Tax liability when transmitted through the Sales Tax e-File Program. The Debit Detail Record includes the bank account information for ACH debit authorizations. Debit authorizations may be transmitted with the electronic return by providing taxpayer name, phone number, routing number, bank account number, payment amount, requested settlement date and tax type within the return data.

Accepted debit authorizations will receive a confirmation number provided by the department.

ACH Credit Option

To use electronic funds transfer, for the ACH Credit option, a participant will be required to preregister on Form EFT-1, Authorization Agreement for Electronic Funds Transfer.

Paper Checks

Paper checks may be submitted along with a scannable payment voucher produced by the software the filer is using.

Section 2 - Contact Information

General Questions - Sales and Use Tax:

TAXPAYER ASSISTANCE DIVISION
ILLINOIS DEPARTMENT OF REVENUE
PO BOX 19044
SPRINGFIELD IL 62794-9044
1 800 732-8866 or 217 782-3336
1 800 544-5304 – TDD (telecommunications device for the deaf)
tax.illinois.gov

General Questions-for electronic filing or enrollment using Form IL-8633-B:

ELECTRONIC COMMERCE DIVISION (8:30 a.m. – 5:00 p.m.)
ILLINOIS DEPARTMENT OF REVENUE
PO BOX 19479
SPRINGFIELD IL 62794-9479
1 217 524-4767 or 1 866 440-8680

Technical Questions or system failures - regarding communications using the “Illinois Gateway”:

ELECTRONIC COMMERCE SUPPORT (7:00 a.m. – 4:15 pm.)
1 217 785-5589 or 1 217 782-3791
After hours, weekends, or holidays – 1 217 782-8622

Technical Questions - regarding record layouts or acknowledgments:

ELECTRONIC COMMERCE DIVISION (8:30 a.m. – 5:00 pm)
ILLINOIS DEPARTMENT OF REVENUE
PO BOX 19479
SPRINGFIELD IL 62794-9479
1 217 524-4767 or 1 866 440-8680

Section 3 - Enrollment for Electronic Filing and Electronic Funds Transfer

Enrollment for Electronic Filing

All participants must enroll to be accepted into the sales tax direct electronic filing program. This includes taxpayers, software developers, and any participant who is transmitting directly to IDOR (either for themselves or others).

To enroll, complete and sign Form IL-8633-B, Business Electronic Filing Enrollment, and mail to:

**ELECTRONIC COMMERCE DIVISION
ILLINOIS DEPARTMENT OF REVENUE
PO BOX 19479
SPRINGFIELD IL 62794-9479
Fax (217) 782-7992**

Participants who are software developers and transmitters that will transmit directly to the "Illinois Gateway" will be assigned a Login Identification (LID/ETIN) number upon enrollment. They must successfully complete testing to be accepted in the program. A "test" password will be assigned for this purpose upon enrollment. IDOR will issue written notification of the LID/ETIN and the test password after the enrollment form is processed.

Once testing is successfully completed, a "production" password is assigned and provided in written notification to approved transmitters. The LID/ETIN and passwords are unique for each transmitter and cannot be transferred among participants. The passwords must be kept secure. To access our internet gateway, all transmitters must use their LID/ETIN and either the test or the production password.

Taxpayers must select and enter a "signature code" (or electronic signature) on Form IL-8633-B, Business Electronic Filing Enrollment and sign the form. The signature code must be included in each electronic return, or the return is designated as **not signed**. All returns designated as "unsigned" generate notices (and possibly penalty) to the taxpayer during tax system processing by IDOR.

Enrollment for Electronic Funds Transfer (EFT)

Taxpayers who wish to pay by Electronic Funds Transfer using the ACH Credit option must enroll in IDOR's EFT Program. To enroll in the EFT Program, Form EFT-1, Authorization Agreement for Electronic Funds Transfer must be completed, signed and submitted. Form EFT-1, Authorization Agreement for Electronic Funds Transfer should be submitted along with the IL-8633-B, Business Electronic Filing Enrollment to the address provided above. Form EFT-1 and the Technical Instructions are available on IDOR's web site at **tax.illinois.gov**.

Note: Taxpayers do not need to complete the EFT-1 for the ACH Debit option to pay their Sales Tax Liability when transmitted through the Sales Tax e-File Program. The Debit Detail Record includes the bank account information for ACH debit authorizations.

Section 4 - Payment Information

Electronic payment options include:

Option 1: Debit authorization included with an electronic return.

This option allows taxpayers to pay by including payment information in the return data. Taxpayers need to supply their name, phone number, routing number, bank account number, payment amount, requested settlement date, and tax type within the return filing. Payment information is “warehoused” internally by IDOR until the requested settlement date.

Option 2: EFT Debit authorization using IDOR’s EFT Phone System.

This option allows taxpayers to pay independent of the electronic return filing by using the existing EFT System, and requires a toll-free phone call to the system each time you want to start a debit payment. Detailed instructions on using the debit option of the EFT System are provided after Form EFT-1, Authorization Agreement for Electronic Funds Transfer is submitted and processed.

Option 3: EFT Credit using IDOR’s EFT Phone System.

This option allows taxpayers to pay independent of the electronic return filing by contacting their financial institution each time they want to start a payment. Detailed instructions for initiating an ACH credit are provided after Form EFT-1, Authorization Agreement for Electronic Funds Transfer is submitted and processed.

Taxpayers who are not required to pay electronically and want to pay by paper check, must submit payment along with a scannable payment voucher produced from their software.

Section 5 -Timeliness and Date Received of Return and Payment

Return

To be considered timely filed, a return must be acknowledged as accepted, or accepted with errors, no later than 11:59 p.m. (Central Standard Time) on the due date. This also applies to the retransmission of returns that were previously acknowledged as rejected. The IDOR Illinois Gateway records the date and time a transmission is complete. If a return is acknowledged as accepted or accepted with errors, this date and time is used as the date and time the return is received. If a return is acknowledged as rejected, the return is considered not filed.

Participants should assure that the return transmission is started early enough to be completed prior to the end of the day (11:59 p.m. Central Standard Time) on the return due date. To avoid late filing, IDOR recommends that participants schedule transmissions to allow for timely correction and retransmission in the case of a rejected transaction.

Electronic Payment

An electronic payment initiated on the due date for the next available settlement date will be considered timely paid. We recommend payments be initiated one or two days before the due date for settlement on the due date.

Payment by Paper Check

To be considered timely paid, the payment and accompanying voucher must be postmarked no later than the due date. However, if the taxpayer is mandated by IDOR to pay electronically, but instead makes payment with a paper check by mail, the postmark provision does not apply. In this case, the payment by check must be deposited as collected funds to IDOR's account on or before the due date.

Section 6 - Monitoring and Suspension

IDOR will monitor the quality of electronic transmissions and return data. If the quality is unacceptable, IDOR will contact the electronic filer, software developer, or transmitter. IDOR will also monitor complaints about participants and issue warning or suspension letters as appropriate. IDOR reserves the right to suspend the electronic filing privilege of any participant who varies from the requirements, specifications, and procedures stated in this guide or any corresponding administrative rules, or who does not consistently transmit error-free returns. When suspended, the participant will be advised of the requirements for reinstatement into the program.

Section 7 - Communications Using HTTPS

These procedures are currently in effect. IDOR may find it necessary to alter procedures in the future to adapt to changing conditions.

Files may be transmitted to and from the IDOR Gateway server via the Internet using Secure Socket Layer (SSL) technology. File transmission must use the https post method. This type of transmission provides secure data exchange by strongly encrypting the data stream in both directions according to the SSL protocol.

The Illinois Department of Revenue has a utility program available to transmitters that can send files via https post. Transmitters may use this program without charge. The utility runs on Microsoft Windows operating systems. Transmitters may also write their own software if that is preferred.

Transmissions to the Gateway require a modern high speed Internet connection. High bandwidth Internet connections, such as a T1 line or DSL, is preferred; although slower 56K modem connections can be used provided that the connection to the Internet service provider is of high quality and somewhat above the 28.8 K-baud range. Noisy phone lines or transmission speeds below this range are not reliable. Transmissions should be posted to the following URL:

<https://biz.revenue.state.il.us/il/gateway> .

Before users can transmit files, they must register with the Illinois Department of Revenue to obtain a login I.D. and password.

The Gateway conforms to standard http protocols. For fuller documentation regarding the http specification in general, refer to the World Wide Consortium web site at the following URL:
<http://www.w3c.org>.

In particular, for documentation regarding the http protocol, see RFC 2616: Hypertext Transfer Protocol – HTTP/1.1 at URL: <http://www.w3.org/Protocols/rfc2616/rfc2616.html>.

For documentation regarding http authentication protocols, see RFC 2617: HTTP Authentication: Basic and Digest Access Authentication at URL: <http://www.ietf.org/rfc/rfc2617.txt>.

The Gateway uses basic authentication, which is made secure by the SSL encryption. The login I.D. and password are applied to the http transmission headers in the form of a standard basic authentication header. The SSL protocol guarantees that the I.D. and password are also encrypted during transmission. As is standard practice, the basic authentication header must be base-64 encoded. The Gateway supports both challenge-response and pre-emptive authentication.

Section 7 - Communications Using HTTPS (continued)

The Gateway adheres to the following practices:

- ◆ ☐ All transmissions or requests to the Gateway occur in a single request-response https session.
- ◆ ☐ No cookies are placed on the users' computers. No session tracking is required, and as a result, cookies are not needed.
- ◆ ☐ Only one file may be transmitted per session. To enforce this rule, the Gateway does not allow MIME attachments. One consequence of this is that transmitters cannot use the HTML forms transmission protocol built into most web browsers, as these automatically generate MIME headers.

Required HTTPS Transmission Headers

The following shows an example of a complete http post transmission including all HTTP transmission headers:

```
POST /il/gateway HTTP/1.0
Host: biz.revenue.state.il.us
Authorization: Basic MQBxWrS7hmQ3V4ly (Base64 encoded)
Accept: text/plain, text/html, text/xml
User-Agent: (optional header)
X-Transmit-ID: doc1
Content-Type: text/plain
Content-Length: 97
*****
```

The transmitted file goes here.

This example shows the presence of an authorization header with a value given as a base-64 encoded user I.D. and password. Also, as shown, transmitters must supply a "Content-Length" header for file uploads giving the byte-size of the transmitted file. The Gateway uses this value to verify that the number of bytes received matches what the transmitter actually intended to send. It is the responsibility of the transmitter to make sure this value accurately reflects the size of the file being transmitted.

The http transmission headers must also include one extended header named "X-Transmit-ID". This header governs the action of the Gateway. The header has two reserved values – "NewAck" and "LastAck". These values are not case sensitive. A value of "NewAck" will cause the Gateway to return all available acknowledgment files in the http response stream. These files will be concatenated together into one big file without file separators. A value of "LastAck" given to the "X-Transmit-ID" header will cause the Gateway to re-transmit all acknowledgment files that were transmitted the last time the "NewAck" request was sent to the Gateway. Any other value of the "X-Transmit-ID" header will cause the Gateway to expect to receive a transmission from the user. This value will be echoed back to the user at the end of the transmission in an acknowledgment receipt response as explained in the next section.

Section 7 - Communications Using HTTPS (continued)

Gateway Responses

As previously stated, the Gateway responds by transmitting all available acknowledgment files when the transmitter issues a request via the “X-Transmit-ID” extended header. This type of response will always include a “Content-Length” http transmission header giving the exact number of bytes being returned.

The transmitter should always verify that the number of bytes received matches exactly the number of bytes given in this “Content-Length” header.

In addition to returning acknowledgment files to the transmitter, the Gateway provides a number of feedback responses when files are received. If a transmitter sends a file with normal completion, the Gateway will respond with an acknowledgment receipt, called an Ack-One receipt. A typical example of an Ack-One response is as follows:

```
HTTP/1.1 200 OK
Content-Type: text/plain
Content-Length: 231
Date: Tue, 09 Dec 2012 21:47:19 GMT
Server: Apache Coyote/1.0
Connection: close
```

Illinois Department of Revenue Acknowledgment One

1. ETIN = 99999
2. TransmissionIDNumber = doc1
3. TransmissionTimeStamp = 12/09/2012 03:47:19 pm
4. FileSize = 97
5. SysFileName = T9999920121209154719146.343

This is the standard response to a successful file transmission and shows the time and date the department received the file. A transmission should not be considered successful unless an Ack-One response is received. The data given shows the received file size and also the value of the “X-Transmit-ID” header, labeled as “TransmissionIDNumber”. This value is returned to the transmitter as a convenience in file tracking. Please keep in mind that the Ack-One response only confirms file “receipt” and not file “acceptance”.

Note: It is the user’s responsibility to connect and pick up acknowledgment files at a later time to verify if the transaction(s) were accepted or rejected.

The Gateway also returns two error responses. In case of an incorrect user I.D. or password, the Gateway will respond with an http status code of “401: Unauthorized” value in the http status code line of the response stream. Likewise, in cases during which some of the department’s systems may be down, the Gateway will respond with an http status code of “503: Service Unavailable”.

Section 7 - Communications Using HTTPS (continued)

Hours of Availability

The Gateway is available to transmitters seven days a week, except during the time from 11:15 p.m. to 2:30 a.m. each day. This system down-time is required for scheduled system maintenance.

Error Recovery/Problems/Backups

If you are having a problem that seems to be caused by hardware or software failure on our end, call Electronic Commerce Support during normal working hours (see Section 2 - Contact Information).

If the problem occurs after normal working hours, call Computer Operations, identify yourself as an electronic transmitter, and explain what is wrong. They will try to correct the problem and/or contact someone who can help you.

Section 8 - Specifications

Structure of Transmission

The illustration on the following page shows the structure of electronic transmissions.

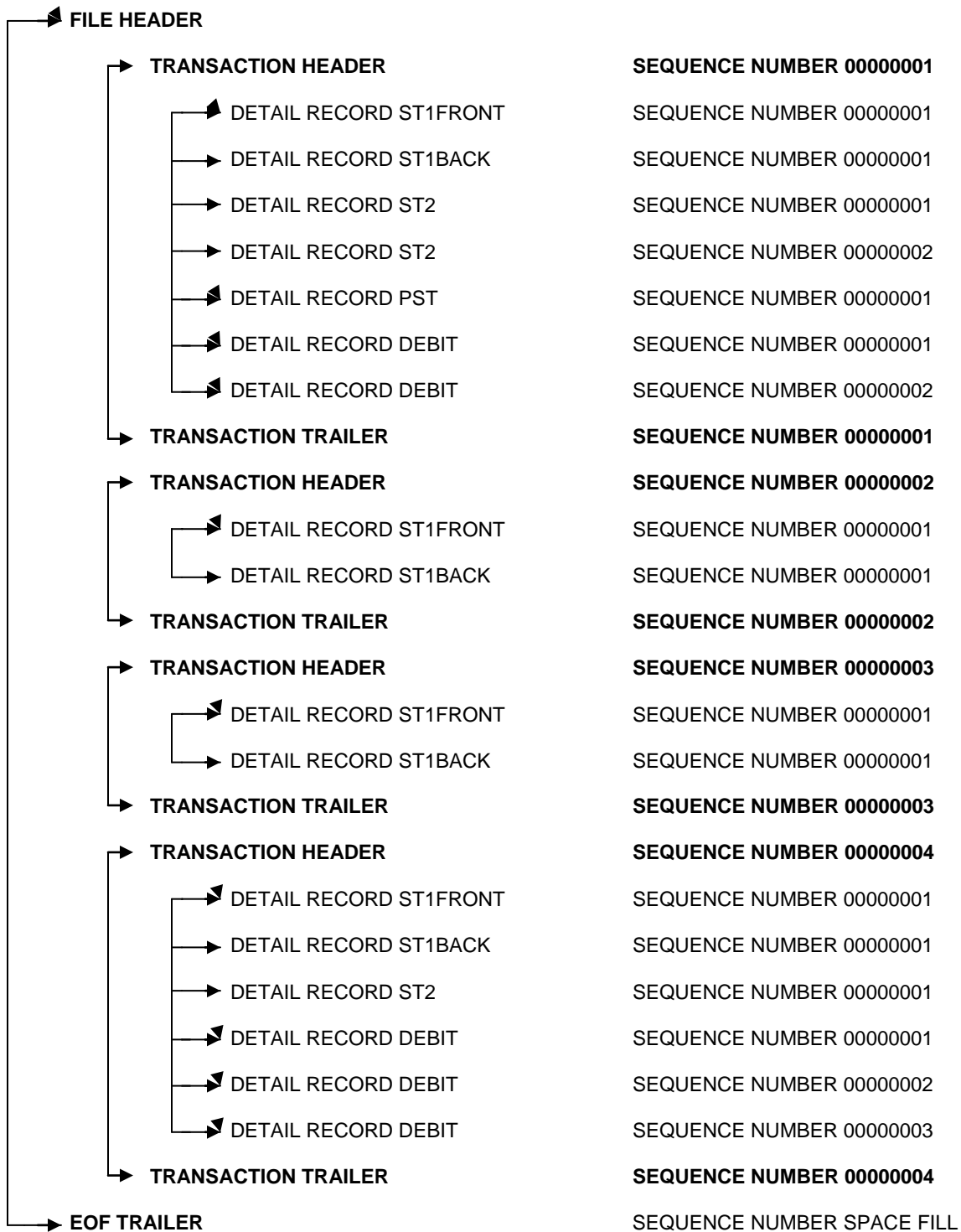
The “HEADER SEQUENCE NUMBER” (Field 050) of the “TRANSACTION HEADER” should start at “00000001”, and the “HEADER SEQUENCE NUMBER” (Field 040) of the “TRANSACTION TRAILER” should match the number in the “TRANSACTION HEADER”.

The “HEADER SEQUENCE NUMBER” (Field 040) of both the “ST-1 FRONT” document and the “ST-1 BACK FOR LINE 2” document should always be “00000001”.

The “SEQUENCE NUMBER” (Field 040) of the “ST-2” document, the “PST-2 (COPY A)” and the Debit Detail Record should start at “00000001” and increment.

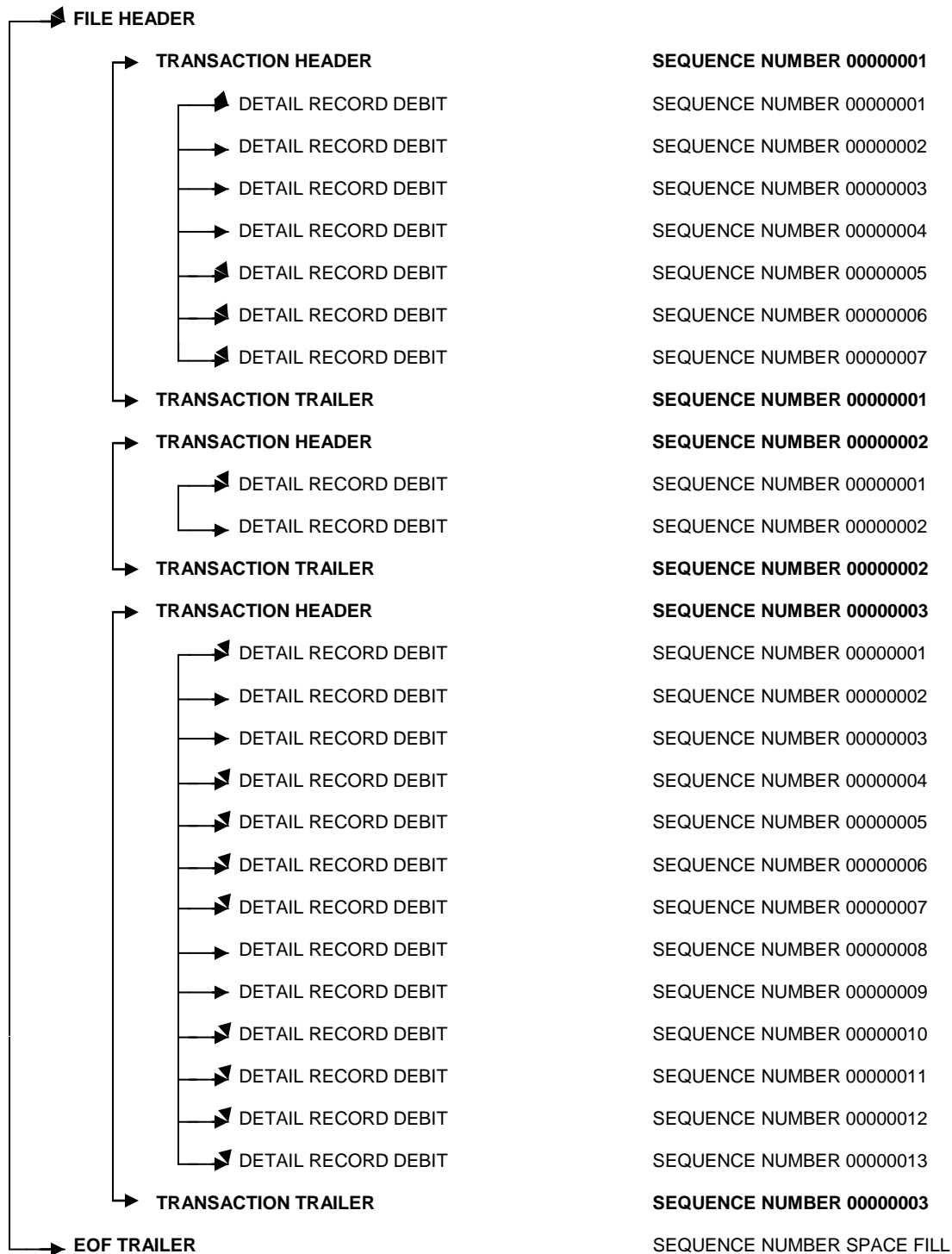
Section 8 – Specifications (continued)

Structure of Transmission – Returns and Payments



Section 8 – Specifications (continued)

Structure of Transmission – Stand Alone Payments (continued)



Section 8 – Specifications (continued)

Data Format

All **financial data elements** are 13-byte, dollar and cents, with the decimal implied two positions from the right. They are “unsigned”, meaning they can only be positive figures.

Examples: \$1.23 = “0000000000123”;
\$12.30 = “0000000001230”;
\$123.00 = “0000000012300”, and;
\$1230.00 = “0000000123000”.

EXCEPTION 1: In the DEBIT DETAIL RECORD FIELD 110, “DEBIT PAYMENT AMOUNT”, is 10-byte, dollar and cents, rather than 13-byte.

EXCEPTION 2: In the ST1 FRONT DETAIL RECORD FIELD 600, “NET TAX DUE”, is a 14-byte, dollar and cents, with the decimal implied three positions from the right. They are “signed”, meaning the right-most position requires a “ ” (space) to indicate a positive figure, or a “-” (dash) to indicate a negative figure.

Examples: \$1.23 = “0000000000123 ”;
negative \$12.30 = “0000000001230-”;
\$123.00 = “0000000012300 ”, and;
negative \$1230.00 = “0000000123000-”.

All **rates** are 6-byte, with the decimal implied one position from the left. They are “unsigned”, meaning they can only be positive.

Examples: 6.5% (or .065) = “006500”;
1.0% (or .01) = “001000”;
1.75% (or .0175) = “001750”, and;
.5% (or .005) = “000500”.

All **gallons** are 9-byte, whole gallons, and should be rounded using standard rounding. They are “unsigned”, meaning they can only be positive.

Examples: 123.5 gallons would be rounded up to 124 and would = “000000124”;
1253.4 gallons would be rounded down to 1253 and would = “000001253”, and;
42125.67 gallons would be rounded up to 42126 and would = “000042126”.